

**STATEMENT OF BASIS (AI No. 3227)**

for draft Louisiana Pollutant Discharge Elimination System permit No. LA0007650 to discharge to waters of the State of Louisiana.

**THE APPLICANT IS:** Saint - Gobain Containers, Inc.  
Ruston Plant  
P.O. Box 4200  
Muncie, Indiana 47307 - 4200

**ISSUING OFFICE:** Louisiana Department of Environmental Quality (LDEQ)  
Office of Environmental Services  
Post Office Box 4313  
Baton Rouge, Louisiana 70821-4313

**PREPARED BY:** Yvonne Baker

**DATE PREPARED:** January 16, 2008

**1. PERMIT STATUS****A. Reason For Permit Action:**

Permit reissuance of a Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term

**B. NPDES permit -** NPDES permit effective date: N/A  
NPDES permit expiration date: N/A  
EPA has not retained enforcement authority.

**C. LPDES permits -**  
LPDES permit effective date: June 1, 2003  
LPDES permit expiration date: May 31, 2008

**D. Date Application Received:** December 3, 2007; Additional information received February 11, 2008.

**2. FACILITY INFORMATION****A. FACILITY TYPE/ACTIVITY - glass container manufacturing facility**

Saint- Gobain Containers (formerly Ball-Foster Glass Container Co., LLC) is an existing glass container manufacturer. They manufacture glass bottles and jars, primarily for use in the food industry, at this facility. In the manufacturing process, the batch system provides a mix of raw materials, which is fed into the furnace where the batch is heated to make molten glass. The molten glass passes through fore hearth channels to the forming machines where the molten glass gobs are formed into bottles or jars.

The shears that cut the glass gobs are sprayed with an animal fat lubricant. The forming machines are lubricated with machine oil. The glassware is then conveyed from the forming machines through an annealing lehr to the inspection and packaging departments. The packaged ware is held in the warehouse for shipment to the customers.

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All wastewater generated in the manufacturing process is directed to the basement where it is then conveyed to the existing cullet quench water recirculating system. In the forming department, molten glass and defective hot ware is sometimes rejected from the forming machines to the basement for recycling. When this occurs, the hot glass is quenched by water from the cullet quench circulating system. Water is pumped from the system for use at each forming machine. The recirculating water system includes a settling chamber where any solids, such as glass fines, are allowed to settle. Then a skimmer removes the surface oils. The skimmed oil is collected in a storage tank for off-site recycling.

Treated water is continuously recirculated for re-use. Overflow may occur from the recirculating water system when there is a disturbance in the water balance. Overflow is discharged through Outfall 004. The recirculating system also receives blowdown from the compressor cooling towers.

Furnace drain water – Whenever the molten glass is drained from a furnace, typically for repair, clean water is used to cool the molten glass, cool the metal chute, and direct the flow of glass down the chute. Each furnace is repaired approximately every 6 to 8 years and a drain occurs over a 2 to 3 day period.

This plant currently operates 2 furnaces and 7 production lines.

**B. FEE RATE**

1. Fee Rating Facility Type: minor
2. Complexity Type: II
3. Wastewater Type: III
4. SIC code: 3221

**C. LOCATION** - 4241 Highway 563 in Simsboro, Lincoln Parish  
Latitude 32° 32' 59", Longitude 92° 46' 0"

**3. OUTFALL INFORMATION**

Outfall 001

\*This outfall has been deleted.

Outfall 101

Discharge Type: furnace drain cooling water

Treatment: none

Location: at the point of discharge located at the northeast corner of the facility (northeast of the manufacturing building)

Flow: 300,000 GPD – once every 3 to 5 years

Discharge Route: via ditch to Mill Creek thence into Bayou D'Arbonne

Outfall 002

\*This outfall has been deleted.

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## 5. TMDL STATUS

### Outfalls 101 and 004

Subsegment 080603 Bayou D'Arbonne - From Lake Claiborne to Bayou D'Arbonne Lake, is not listed on LDEQ's Final 2004 303(d) list as impaired. However, subsegment 080603 was previously listed as impaired for organic enrichment/low DO, for which the below TMDL's have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDL's and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The following TMDL's have been established for subsegment 080603:

### *Tributaries to Bayou D'Arbonne Lake TMDL for Biochemical Oxygen-Demanding Substances*

As per the TMDL, ".....the results of the projection modeling show that the existing DO standard of 5.0 mg/L can be maintained if man-made nonpoint sources are reduced by 95% in the summer and 85% in the winter. No reductions are needed for the point source load." Furthermore, compliance with the TOC and BOD<sub>5</sub> limitations placed in this permit should protect the stream from further impairment.

### Outfall 003

Subsegment 081401, Dugdemona River - From headwater to Big Creek, is not listed on LDEQ's Final 2004 303(d) List as impaired, and to date no TMDL's have been established. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by any future TMDLs.

## 6. PROPOSED EFFLUENT LIMITS

BASIS - See Rationale below.

The following changes were made to the permit:

Outfalls 001, 002, 005, and 006 were deleted;

Outfall 101 is a final outfall rather than an internal outfall since Outfall 001 was deleted;

The limits for Oil and Grease and TSS for Outfall 004 were recalculated to account for an increase in production.

## 7. COMPLIANCE HISTORY/COMMENTS

- A. WQMD – There are no open, appealed, or pending OES/water enforcement actions as of January 16, 2008. There are no recent inspections on file at LDEQ.

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- B. DMR Review/Excursions – A DMR review of years 2005, 2006, and 2007 noted the following exceedances:

<u>Date</u>	<u>Parameter</u>	<u>Outfall</u>	<u>Reported Value</u>	<u>Permit Limits</u>
06/06	pH	001	9.3	6-9 su
06/06	TOC	001	78.4	50 mg/L
06/06	Oil and Grease	001	40.0	15 mg/L
09/06	pH	004	9.2	6-9 su
11/06	pH	004	9.3	6-9 su

## 8. EXISTING EFFLUENT LIMITS

**Outfall 001:** stormwater runoff from the northeastern plant area and the northern portion of the cullet pad and previously monitored furnace drain water

<u>Pollutant</u>	<u>Monthly Average</u>	<u>Daily Maximum</u>	<u>Frequency</u>
Flow	---	Report	1/quarter
TOC	---	50 mg/L	1/quarter
Oil & Grease	---	15 mg/L	1/quarter
pH Min/Max Values	6.0 (min)	9.0 (max)	1/quarter

**Outfall 101:** furnace drain water

<u>Pollutant</u>	<u>Monthly Average</u>	<u>Daily Maximum</u>	<u>Frequency</u>
Flow	---	Report	1/quarter
TOC	---	50 mg/L	1/quarter
Oil & Grease	---	15 mg/L	1/quarter

**Outfall 002:** stormwater runoff from the southern portion of the cullet pad and south plant areas

<u>Pollutant</u>	<u>Monthly Average</u>	<u>Daily Maximum</u>	<u>Frequency</u>
Flow	---	Report	1/quarter
TOC	---	50 mg/L	1/quarter
Oil & Grease	---	15 mg/L	1/quarter
pH Min/Max Values	6.0 (min)	9.0 (max)	1/quarter

**Outfall 003:** treated sanitary wastewater

<u>Pollutant</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Frequency</u>
Flow	Report	Report	1/6 months
BOD <sub>5</sub>	30 mg/L	45 mg/L	1/6 months
Fecal Coliform	200 col/100ml	400 col/100ml	1/6 months
pH Min/Max Values	6.0 (min)	9.0 (max)	1/6 months

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**Outfall 004:** recirculation water system overflow, includes cullet quench water, cooling tower blowdown, non-contact cooling water, compressor blowdown, and steam – cleaning water

Pollutant	Monthly Average	Daily Maximum	Frequency
Flow	Report	Report	1/month
Oil and Grease	40.2 lbs/day	80.4 lbs/day	1/month
TSS	93.8 lbs/day	187.6 lbs/day	1/month
pH Min/Max Values	6.0 (min)	9.0 (max)	1/month

**Outfall 005:** stormwater runoff from the batchhouse and cullet pad areas

Pollutant	Monthly Average	Daily Maximum	Frequency
Flow	---	Report	1/quarter
TOC	---	50 mg/L	1/quarter
Oil & Grease	---	15 mg/L	1/quarter
pH Min/Max Values	6.0 (min)	9.0 (max)	1/quarter

**Outfall 006:** stormwater runoff between railspur and south road

Pollutant	Monthly Average	Daily Maximum	Frequency
Flow	---	Report	1/quarter
TOC	---	50 mg/L	1/quarter
Oil & Grease	---	15 mg/L	1/quarter
pH Min/Max Values	6.0 (min)	9.0 (max)	1/quarter

## 9. ENDANGERED SPECIES

The receiving waterbody, Subsegment 080603 and 081401 of the Ouachita Basin is not listed in Section 11.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 24, 2007 from Boggs (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

## 10. HISTORIC SITES

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

## 11. TENTATIVE DETERMINATION

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in the application.

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## **12. PUBLIC NOTICES**

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

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**Rationale for Saint - Gobain Containers, Inc.**

1. **Outfall 101** – furnace drain cooling water (flow is 300,000 GPD; once every 3 to 5 years)

<u>Pollutant</u>	<u>Limitation</u> Mo. Avg: Daily Max (Mg/l)	<u>Reference</u>
Flow (GPD)	---:Report	
TOC	---:50 mg/l	BPJ; existing permits for similar outfalls
Oil & Grease	---:15 mg/l	BPJ; existing permits for similar outfalls
pH	6.0 - 9.0 su	BPJ; existing permits for similar outfalls

**Treatment:** none

**Monitoring Frequency:** Quarterly for all parameters at the point of discharge located at the northeast corner of the facility. (BPJ; existing permits for similar outfalls)

**Limits Justification:** BPJ; existing permits for similar outfalls

2. **Outfall 003** - treated sanitary wastewater (flow is intermittent, Maximum 25,000 GPD)

<u>Pollutant</u>	<u>Limitation</u> Mo. Avg: Weekly Avg (Mg/l)	<u>Reference</u>
Flow (GPD)	Report:Report	
BOD <sub>5</sub>	30:45 mg/l	BPJ; per previous permit
TSS	30:45 mg/l	BPJ; per previous permit
Fecal Coliform	200:400 col/100ml	BPJ; per previous permit
pH	6.0 - 9.0 su	BPJ; per previous permit

**Treatment:** stabilization ponds, evaporation, and chlorination

**Monitoring Frequency:** semiannually for all parameters at the point of discharge from the final pond located at the southeast corner of the facility. (BPJ per previous state permit, WP1071)

**Limits Justification:** BPJ per previous permit and the Class II General Sanitary permit.

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3. **Outfall 004** - Recirculating water system overflow. Includes cullet quench water, cooling tower blowdown, non-contact cooling water, compressor blowdown, and steam-cleaning water (flow is 55,000 GPD)

<u>Pollutant</u>	<u>Limitation</u> Daily, Avg; Daily Max (lbs/day)	<u>Reference</u>
Flow (GPD)	---: Report	
Oil & Grease	45.2:90.5	40 CFR 426.87; Subpart H
TSS	105.6:211.1	40 CFR 426.87; Subpart H
pH	6.0 - 9.0 su	40 CFR 426.87; Subpart H

**Treatment:** none

**Monitoring Frequency:** Once per month for all parameters at the point of discharge from the oil/water separator. (BPJ; existing permits for similar outfalls)

**Limits Justification:** Saint-Gobain Containers is subject to Best Conventional Pollutant Control Technology (BCT) effluent limitation guidelines 40 CFR 426.87 Subpart H.

Production X Guideline = Permit Limit

Oil & Grease – Daily Max – 1,508,000 lbs X 0.06 lbs/1000 lbs = 90.5 lbs

Oil & Grease – Daily Avg – 1,508,000 lbs X 0.03 lbs/1000 lbs = 45.2 lbs

TSS – Daily Max – 1,508,000 lbs X 0.14 lbs/1000 lbs = 211.1 lbs

TSS – Daily Avg – 1,508,000 lbs X 0.07 lbs/1000 lbs = 105.6 lbs

BPJ Best Professional Judgement  
 BCT Best Conventional Pollutant Control Technology  
 su Standard Units

#### NOTE

For outfalls containing concentration limits, the usage of concentration limits is based on BPJ for similar outfalls since the flow is variable and estimated.

#### **STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENT**

A SWP3 is included in the permit because in accordance with LAC 33:IX.2511.A.1, storm water discharges shall not be required to obtain an LPDES permit "... except... discharges associated with industrial activity." In accordance with LAC 33:IX.2511.B.14.a-k, facilities classified as SIC code 3221 are considered to have storm water discharges associated with industrial activity.

The SWP3 shall be prepared, implemented, and maintained within (6) months of the effective date of the final permit. The plan should identify potential sources of storm water pollution and ensure the implementation of practices to prevent and reduce pollutants in the storm water discharges associated with industrial activity at the facility (see Narrative Requirements for the AI).